

FE 322 FOOD PRODUCTION MANAGEMENT

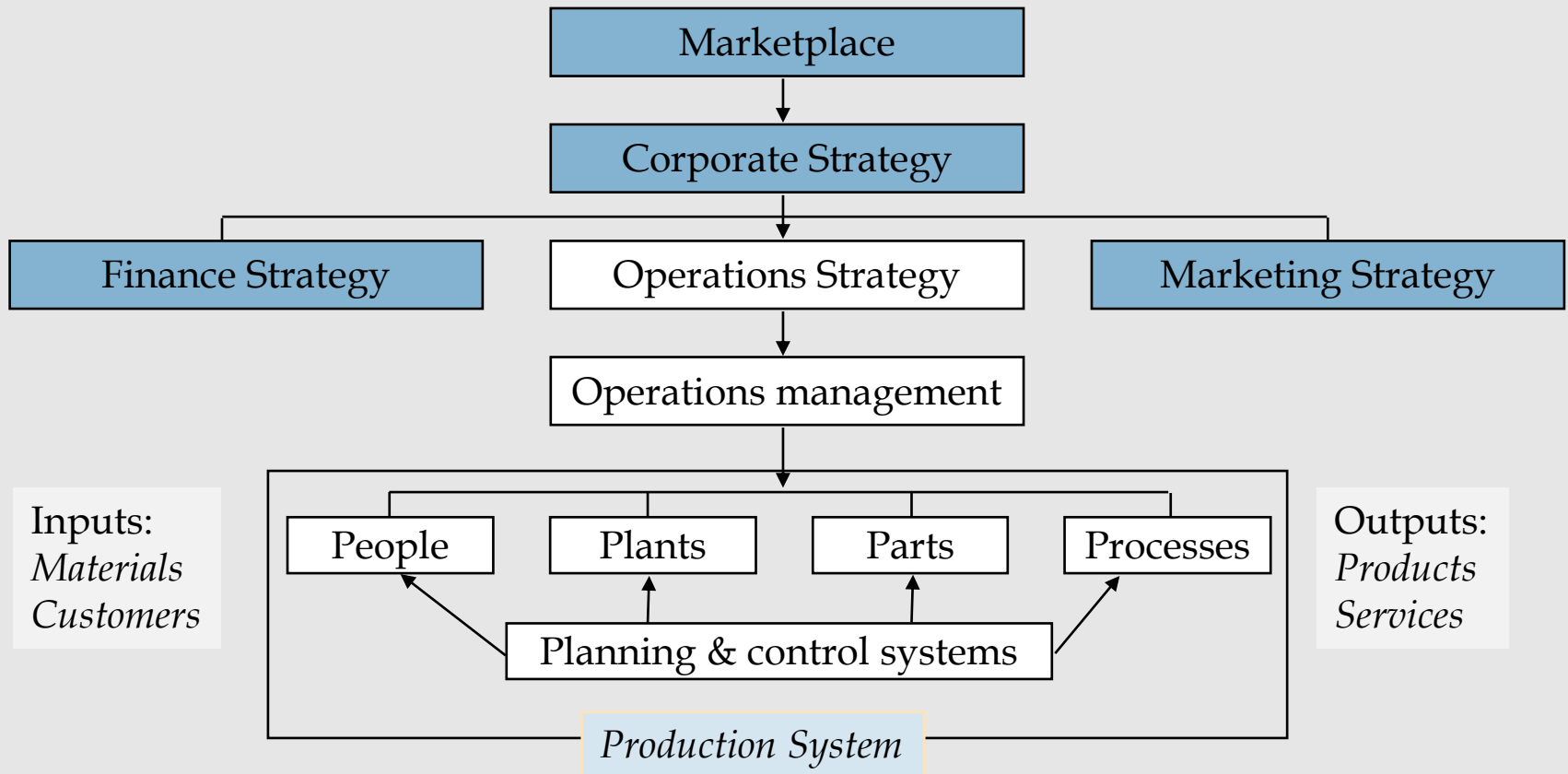
1. INTRODUCTION TO MANAGEMENT SYSTEMS



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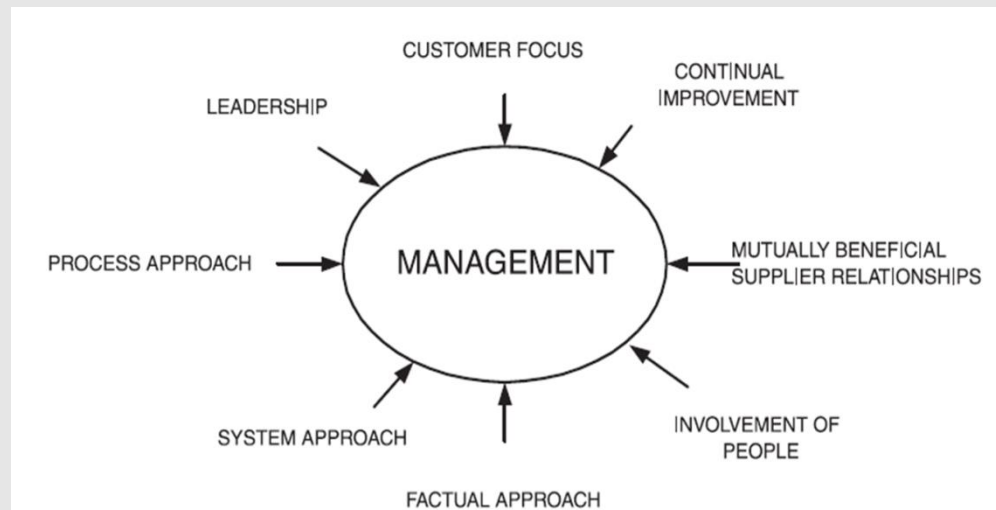
INTRODUCTION TO MANAGEMENT SYSTEMS

- **Operations management** may be defined as the *planning, organizing, staffing, directing,* and *controlling* the *production system* that creates the firm's primary *products and services*



TQM - TOTAL QUALITY MANAGEMENT

- The basic principles for the Total Quality Management (TQM) philosophy of doing business are to satisfy the customer, satisfy the supplier, and continuously improve the business processes. Organizations depend on their customers and therefore should understand current and future customer needs, should meet customer requirements and strive to exceed customer expectations. Nearly every organized activity can be looked upon as a process. This process is supported by an organization consisting of people and their relations, resources and tools. Continuous improvement is an integral part of a total quality management system. Common tool to achieve to continuous improvement could be the plan-do-check-act (PDCA) cycle, often called the Deming Wheel, which conveys the sequential and continual of the continuous improvement process.



TQM - TOTAL QUALITY MANAGEMENT

Customer focus

Organizations depend on their customers and therefore should understand current and future customer needs, meet customer requirements and strive to exceed customer expectations.

Leadership

Leaders establish unity of purpose and direction for the organization. They should create and maintain the internal environment in which people can become fully involved in achieving the organization's objectives.

Process approach

A desired result is achieved more efficiently when related resources and activities are managed as a process.



TQM - TOTAL QUALITY MANAGEMENT

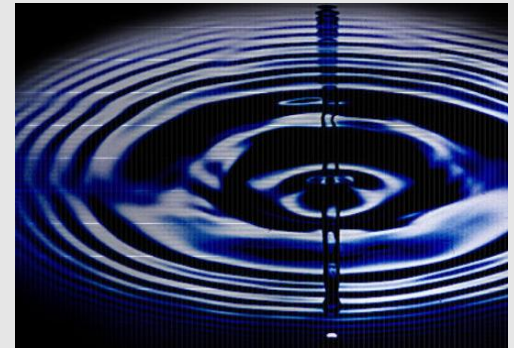
System approach to management

Identifying, understanding and managing interrelated processes as a system contributes to the organization's effectiveness and efficiency in achieving its objectives.



Continual improvement

Continual improvement of the organization's overall performance should be a permanent objective of the organization.



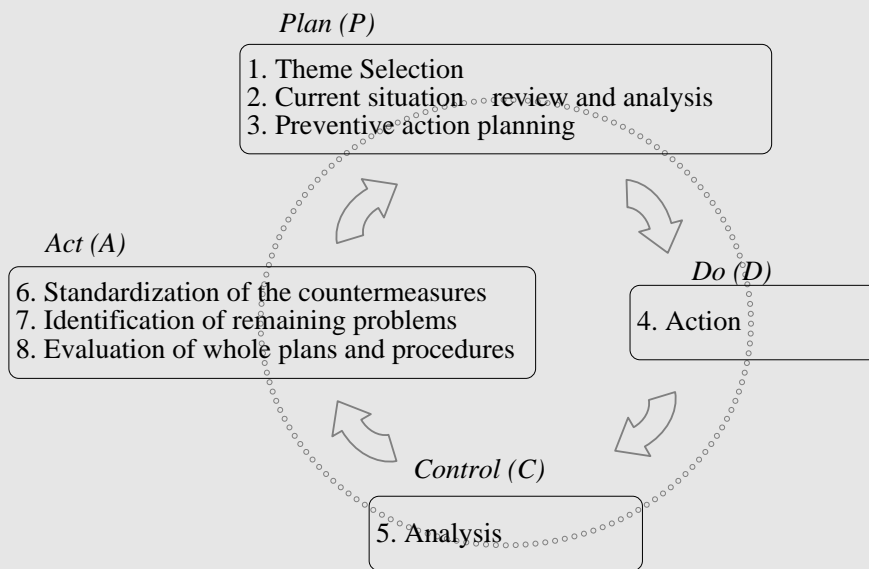
Mutually beneficial supplier relationships

An organization and its suppliers are interdependent and a mutually beneficial relationship enhances the ability of both to create value.



CONTINUOUS IMPROVEMENT - Deming Cycle

Continuous improvement is a management philosophy that approaches the challenge of product and process improvement. Specifically, continuous improvement seeks continual improvement of machinery, materials, labor utilization, product quality and safety, and production methods through application of suggestions and ideas of team members



Deming Wheel (PDCA Cycle)

Plan (P): The plan phase of the cycle is an improvement area and a specific problem with it to be identified. In this phase, objectives and strategies are developed and necessary sources are determined.

Do (D): The do phase of the cycle deals with implementing the changes according to the plan.

Check (C): The check phase deals with evaluating data collected during implementation.

Act (A): During the act phase, the improvement is codified as the new standard procedure; necessary revisions are applied and replicated in similar processes throughout the organization.

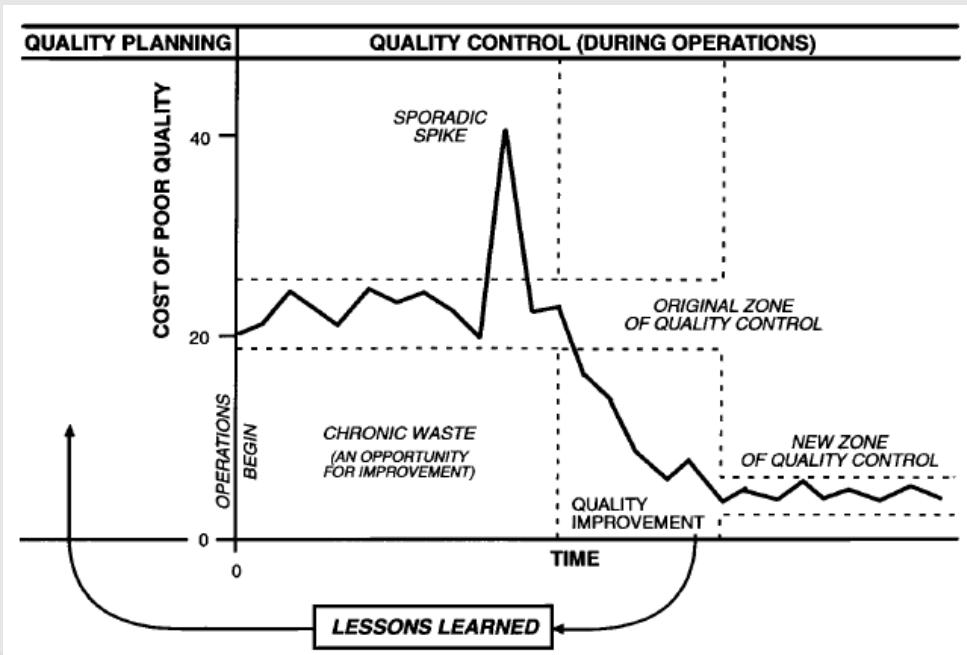
CONTINUOUS IMPROVEMENT - JURAN TRILOGY

To attain quality, it is well to begin by establishing the “vision” for the organization, along with policies and goals.

Conversion of goals into results (making quality happen) is then done through managerial processes – sequences of activities that produce the intended results. Managing for quality makes extensive use of three such managerial processes:

- Quality planning
- Quality control
- Quality improvement

These processes are now known as the “Juran trilogy.”



Planning

- Determine needs
- Establish product
- Establish process
- Develop process
- Set goals

Control (remove sporadic deficiencies)

- Run process
- Evaluate performance
- Compare to goals
- Act on differences

Improvement (remove chronic deficiencies)

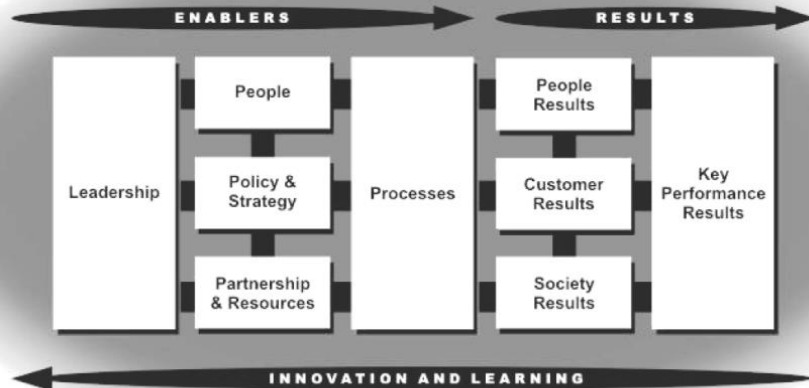
- Nominate projects
- Establish teams
- Use improvement process
- Provide resources

EFQM (European Foundation for Quality Management)

EFQM (formerly known as the European Foundation for Quality Management) is a non-profit membership foundation based in Brussels. EFQM is the custodian of the EFQM Excellence Model, a non-prescriptive management framework that is widely used in public & private sector organisations throughout Europe and beyond.

EFQM Membership is open to organisations, rather than individuals. Members include: BMW, EDF, Grundfos, Philips, Ricoh, Robert Bosch, Solvay and Trimo.

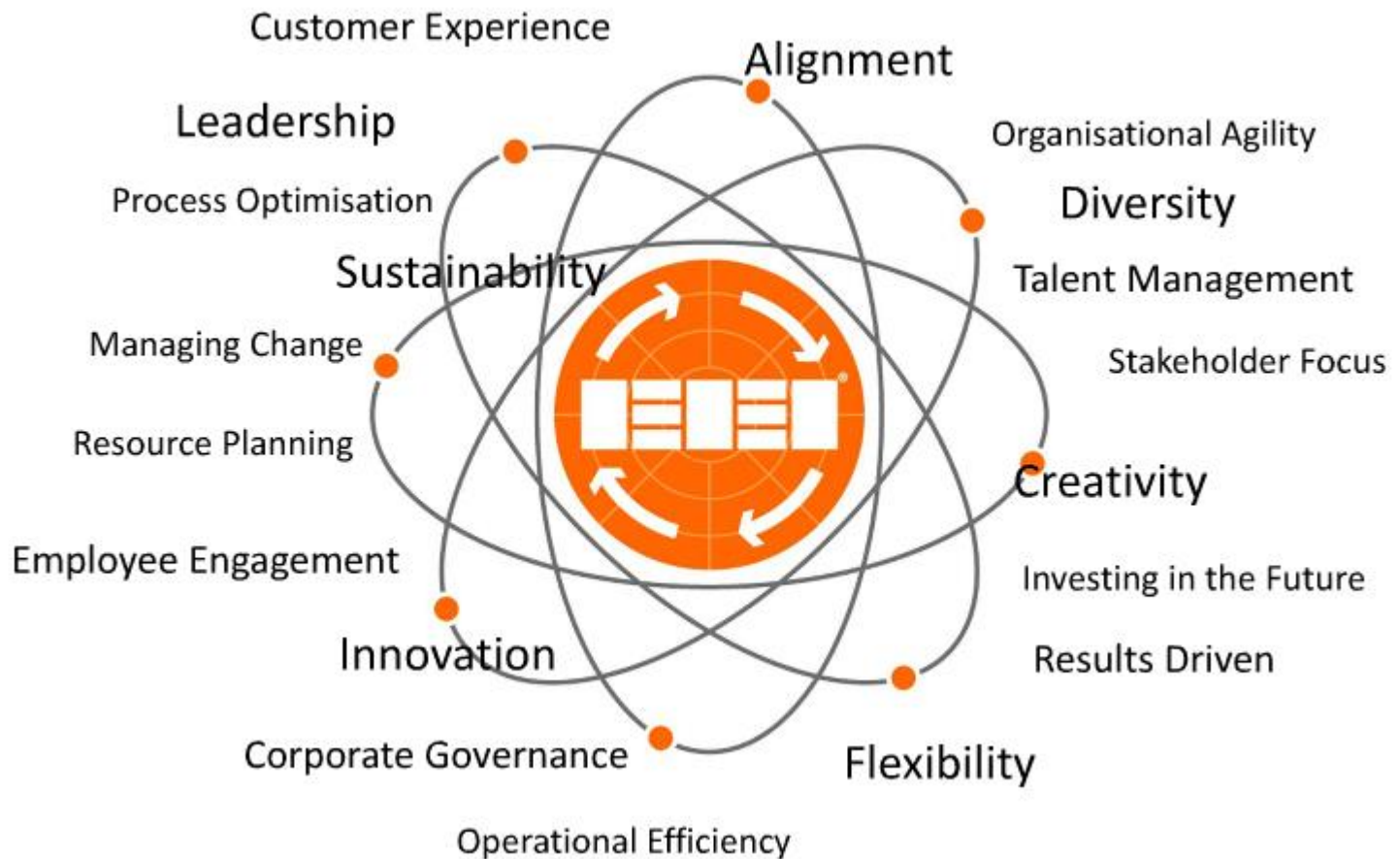
EFQM runs the annual EFQM Excellence Award, which is designed to recognise organisations that have achieved an outstanding level of sustainable excellence.



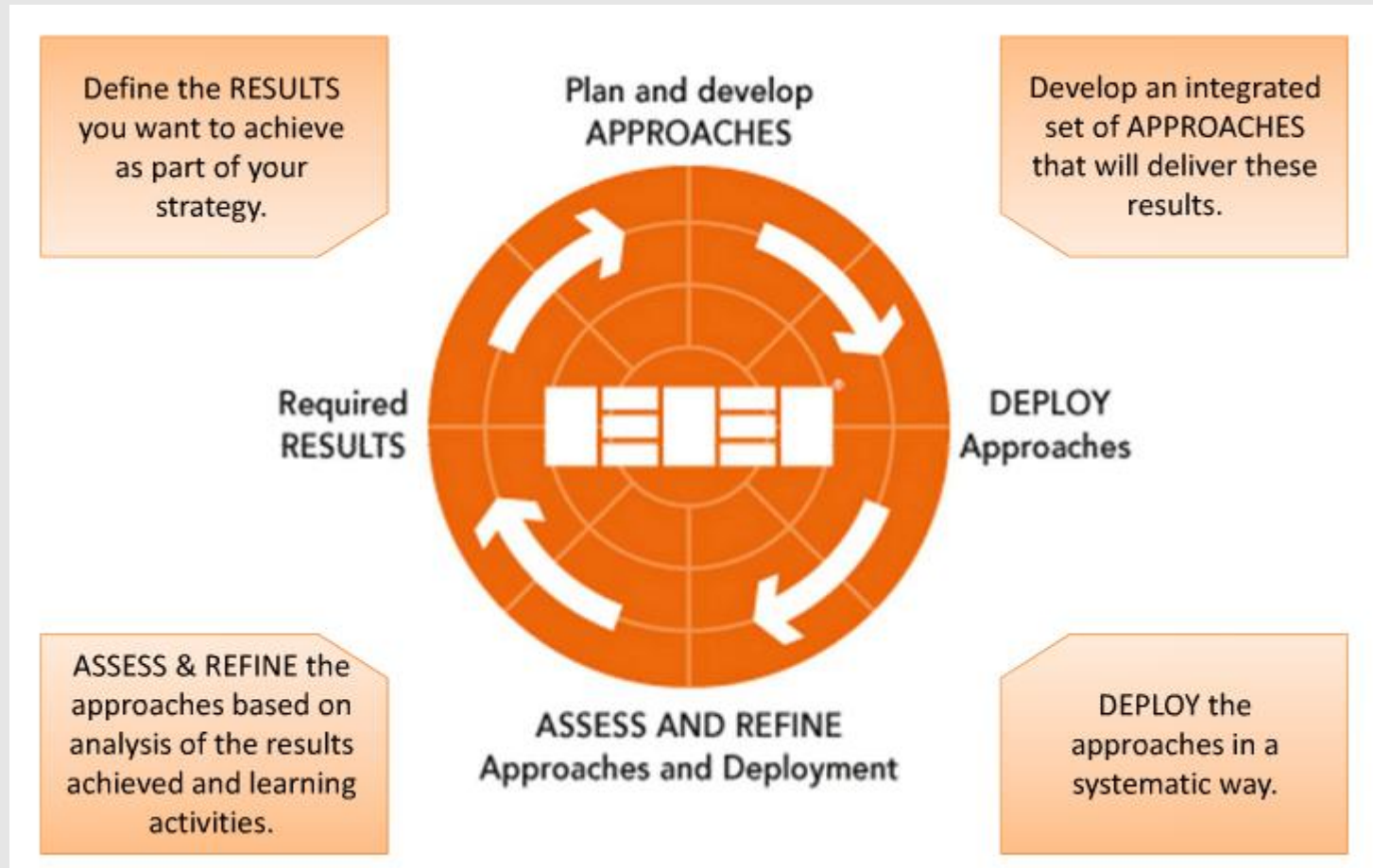
- Excellent organisations achieve and sustain superior levels of performance that meet or exceed the expectations of all their stakeholders.
- To achieve sustainable success, EFQM provides guidance through a set of three integrated components:
 - The Fundamental Concepts of Excellence: The underlying principles which are the essential foundation of achieving sustainable excellence for any organisation.
 - The EFQM Excellence Model: A framework to help organisations to convert the Fundamental Concepts and RADAR thinking into practice.
 - RADAR logic: A simple but powerful tool for driving systematic improvement in all areas of the organisation.



EFQM (European Foundation for Quality Management)



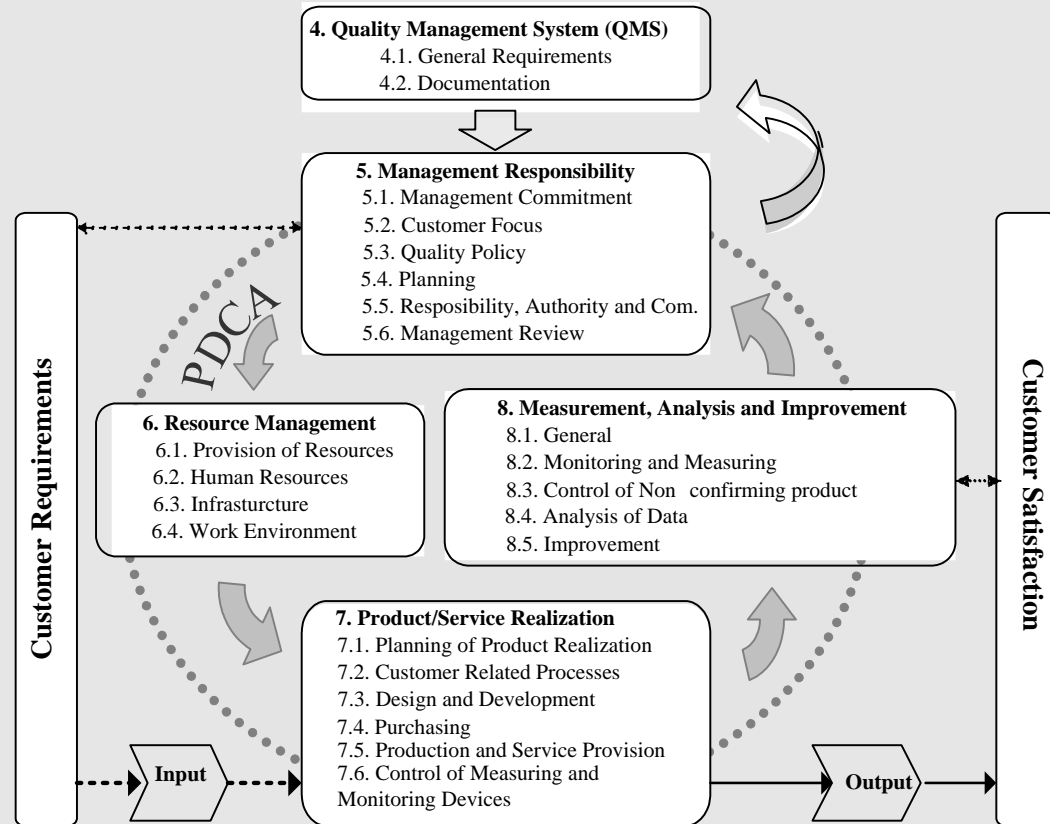
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ISO 9000-QUALITY MANAGEMENT SYSTEM STANDARD

ISO 9000:2000 is in fact families of standards developed to assist organizations implement and operate effective quality management systems (QMS). ISO 9000:2000 consisted of quality systems that focused on documenting all quality assurance and improvement processes in a company (ISO, 1999). Although the ISO 9000:2000 was originally developed for the manufacturing sector, it had been applied to many service organizations and was gaining some acceptance in the food industry.

The ISO 9000:2000 standard describes a basic set of 8 elements by which quality management system can be developed and implemented.



ISO 9001:2015

- The ISO 9000:2000 standard, which has since been updated to ISO 9001:2015, outlined eight key principles for quality management systems. These principles are designed to help organizations improve their performance and provide a sound basis for sustainable development initiatives.
- These principles served as a foundation for the ISO 9001 standards, which are part of the ISO 9000 family, and they are still relevant in the current iterations of the standards, even though they may not be explicitly listed as such in the latest versions. Organizations are encouraged to integrate these principles into their quality management systems to improve performance and drive sustainable success.

ISO 9001:2015

Customer Focus: Organizations should understand current and future customer needs, meet customer requirements, and strive to exceed customer expectations.

Leadership: Leaders establish unity of purpose and direction of the organization. They should create and maintain an internal environment in which people can become fully involved in achieving the organization's objectives.

Involvement of People: People at all levels are the essence of an organization, and their full involvement enables their abilities to be used for the organization's benefit.

Process Approach: A desired result is achieved more efficiently when activities and related resources are managed as a process.

System Approach to Management: Identifying, understanding, and managing interrelated processes as a system contributes to the organization's effectiveness and efficiency in achieving its objectives.

Continual Improvement: Continual improvement of the organization's overall performance should be a permanent objective of the organization.

Factual Approach to Decision Making: Effective decisions are based on the analysis of data and information.

Mutually Beneficial Supplier Relationships: An organization and its suppliers are interdependent, and a mutually beneficial relationship enhances the ability of both to create value.

ISO 22000-FOOD SAFETY MANAGEMENT SYSTEM STANDARD

ISO 22000-2005 FSMS aims to harmonize the requirements for food safety management in food and food related business (ISO, 2005). ISO 22000-2005 FSMS assists the food manufacturers in the use of HACCP principles. Main elements in ISO 22000:2005 FSMS are compatible with ISO 9000:2000 QMS. Both models consist of 5 major elements.

The ISO 9000:2000 standard describes a basic set of 8 elements by which quality management system can be developed and implemented.

